

**THE ANALYSIS OF PROBLEMS IN THE G.C.E (A/L) CHEMISTRY  
PRACTICAL WORK IN SOME SELECTED SCHOOLS IN  
BATTICALOA DISTRICT**

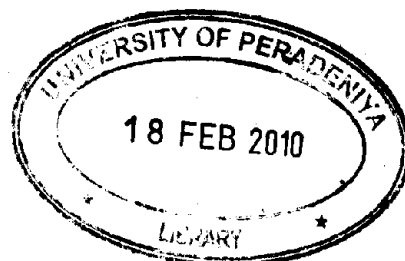
**A PROJECT REPORT PRESENTED  
BY SOUNDARARAJAN SEGAR**

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## ABSTRACT

The Analysis of Problems in the G.C.E (A/L) Chemistry Practical Work in some selected schools in Batticaloa District

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The problems of prevailing teaching learning process in practical work were identified by giving questionnaires to the G.C.E (A/L) Chemistry teachers and students, and by interviewing senior chemistry teachers, The Zonal Director of Education, Assistant Director of Education in Science, Undergraduate Students and Senior lecturer in-Charge of the first year practical class at The Eastern University of Sri Lanka (E.U.S.L).

According to the questionnaires regarding practicals, weaknesses, problems and difficulties for students and teachers were identified. Usually in the classes, group work method was used to conduct practicals. Therefore, all the students do not normally get an equal chance to do practicals. Few students showed good performance in the practicals while others observed it only. Most of the schools do not have a stock of chemicals and enough glass wares. This is perhaps the reason why students tend to do practicals in groups. Another reason why the students can not do the practicals individually is the lack of space and some expired chemicals in the laboratories.

There was shortage of chemicals mainly for, Organic, Some Physical and Inorganic practicals. Due to the unavailability of chemicals and the lack of experienced teachers some practicals were finding difficult to do. Therefore the scheduled practicals were not completed in the specified period.

When I interviewed the senior teachers they mentioned that there would be some other obstacles too affecting the practical work, such as co- curricular and extra- curricular activities have been conducted in school hours. Further the students have lack of prior knowledge of practicals in chemistry in G.C.E (O/L) Science.

In this study I had some discussion with Z.D.E's and A.D.E's in science the following information are gathered. Total number of practicals to be conducted in chemistry for the G.C.E (A/L) students is 84.

It is must to do 15 practicals to complete student's record book out of 84 they said.

But the teachers consider only the 15 practicals in ordered to complete the student's record book. Without considering the remaining practicals they target to complete the syllabus.

The analysis of the performance of G.C.E (A/L) chemistry result and the number of practicals completed by the batches from 2000 to 2006 in 1AB and National schools in Batticaloa district was gathered. The achievement level of students was identified in each schools year wise. In addition the performance of student's in the G.C.E (A/L) Examination could be increased with the number of completed practicals.

The under graduate students stated that many practicals conducted in first year were related to the A/L practical work. Although group work method is used to do the practical work in schools. But all the practical work is done individually in university. Initially practical work were difficult. However, after getting guidance from demonstrators, it was done easily with interest. In comparing with school, continuous practical assessments are conducted followed by the end of the semester. This was also one of the positive attitudes to motivate the students to increase their practical ability. Due to the lack of practical knowledge, the answers for the practical based questions in the G.C.E (A/L) examination were not written properly by students.

When I discussed with lecturer at E.U.S.L who was the in charge of the first year practical work about the contribution of first year students regarding chemistry practical work, I was able to collect some additional information. According to the statement of observation of practical of in charge of 1<sup>st</sup> year practical work, he mentioned that so many difficulties were felt by the students in doing practicals due to their lack of prior knowledge.

Finally, to overcome problems and difficulties discussed, possible solutions and motivations are suggested to increase the number of practical work in the A/L classes.